

Bosch Solar Energy & LRC Committee on 3rd Party Electric Sales April, 2012



Bosch: three business sectors

Overview and 2010 key figures

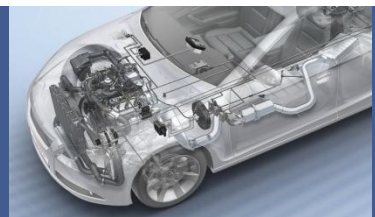
Bosch Group total

- 47.3 billion euros in sales
- 283,500 associates including 34,200 in research and development



Automotive Technology

- 59% share of sales
- World's largest supplier of cutting-edge automotive technology



Industrial Technology

- 14% share of sales
- World's leading manufacturer of large gearboxes and of powertrain, packaging, and process technology, includes solar PV



Consumer Goods and Building Technology

- 27% share of sales¹
- World's largest power tool manufacturer, leading the field in household appliances, heating and cooling, and security systems



¹ Including other segments

Markets and figures for 2010

Americas

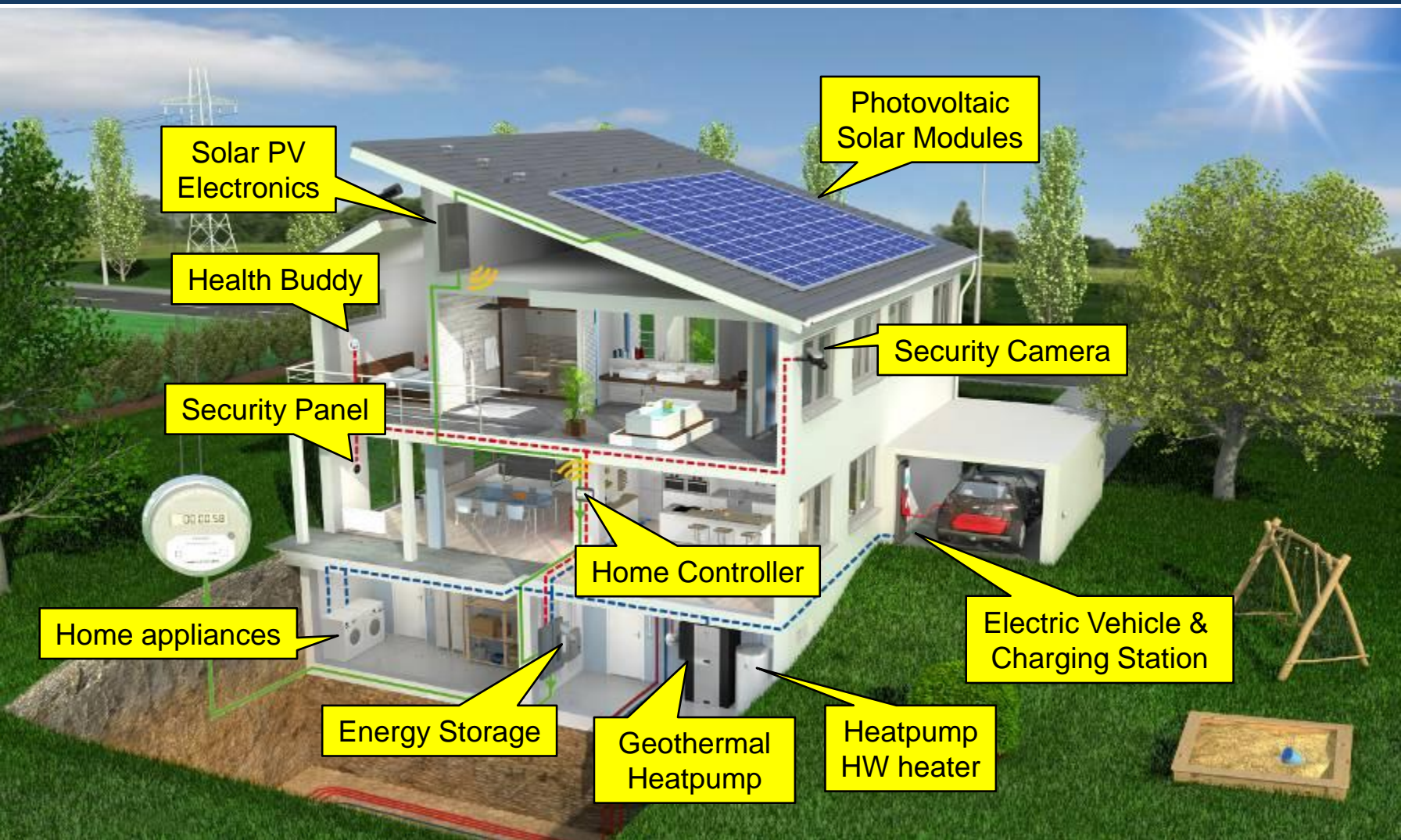
- 18% share of sales
- 33,500 associates
- 49 manufacturing sites



- Over \$5 billion USD globally for R&D
- ~15 patents filed per working day
- ~45% focus on products to enhance energy efficiency, protect the environment and improve building technology
- Ultimately our focus is on “Technology for Life”
- Main solar office in Mooresville, NC



Bosch: the integrated residential offer



Tankless, solar, geothermal & boiler Integrated solutions

- ➔ Bosch is committed to reinventing energy efficiency by offering smart tankless, solar, geothermal & boiler products that produce domestic hot water and indoor comfort solutions.
- ➔ Bosch products work alone or together as an integrated system to provide the opportunity to customize unique energy efficient systems.



Bosch Tankless Water Heaters
If you are building your dream home or simply remodeling your current home, there's a Bosch tankless water heater designed for your needs. Every unit delivers the highest efficiency in the market and is built to stringent Bosch quality standards. With a Bosch tankless water heater you will get an endless supply of hot water and can cut your current water heating bill in half.

Bosch Solar Thermal Systems
Bosch solar hot water solutions bring the first class technology, innovation, reliability, quality and environmental sustainability that Bosch is known for world-wide, to the next level. These systems are designed for superior energy efficiency. This is especially true when combined with a Bosch high efficiency tankless water heater as a back-up system. There is no better choice for your home than a solar thermal system from Bosch to reduce your energy expenses and your carbon foot print.

Bosch Controls
We supply a wide selection of advanced controls to ensure that your heating and domestic hot water system delivers high efficiency and reliable heating year after year. Bosch controls give the heating engineer quick and easy access to all functions of the heating system and also allows the integration of multiple heating products.

Buderus Boilers
Our extensive boiler line includes energy efficient cast iron boilers, as well as the very latest aluminum condensing boilers and multiple boiler cascade systems for maximum energy efficiency.

FHP Geothermal Heat Pumps
Our high efficiency water source heat pump systems provide the most flexible and lowest installation costs of virtually any HVAC system. These systems are the most energy and cost efficient systems on the market making them the greenest technology and the smartest investment for residential heating and cooling applications.

Bosch: the integrated commercial offer

Integrated Commercial Products Micro-grids (demand side)



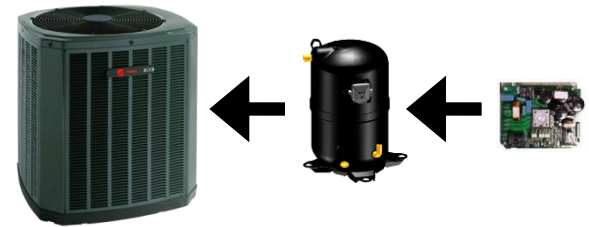
PV Modules & Electronics



**Communication
Gateway & Algorithms**



Lighting Ballast Electronics



HVAC Components (potential)

**Geothermal
Heatpumps**



Electric Vehicle Chargers



Points for consideration:

- Integrated building & energy technologies extend to many industries beyond the solar component, extensive job growth opportunities
- RPS policies are helpful, solar has experienced significant reductions in cost through increasing installed generating capacities, ultimately benefiting all rate payers and IOUs
- Interest in integrated micro-grids allows further performance and cost optimization. Such truly distributed systems enable improved demand management
- Over its life, a solar module will typically produce over 20 times the energy required to produce it
- Every day, the sun radiates more than 6,000 times the energy requirements of the entire world population
- Silicon, the primary solar module ingredient, is the 2nd most abundant element in the earth's crust



Summary

- North Carolina's natural solar resource will allow substantial solar generating capacity
- 3rd party sales will further leverage this abundant resource and:
 - bring further innovation leading to improved cost and load optimization
 - can directly service on-peak demand loads
 - is very scalable and reliable
 - is ready now

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Thank you for your Interest

